



Advising the Congress on Medicare issues

Measuring low-value care

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Overview

- Definition of low-value care
- Claims-based measures of low-value care
- We applied 31 measures to 2012 and 2013 Medicare claims
- Results of our analysis
- Potential policy directions

Low-value care

- Definition
 - Services with little or no clinical benefit
 - When risk of harm from a service outweighs potential benefit
- Potential to harm patients
 - Direct: Risks from low-value service itself
 - Indirect: Service may lead to cascade of additional tests and procedures that contain risks but provide little or no benefit
- Increases health care spending

Motivation for examining low-value care

- Several recent studies of low-value care
- Choosing Wisely: over 70 medical societies identified over 400 tests and procedures that are often overused
- Commission supports value-based insurance design (part of benefit redesign)
- When measuring quality, important to look at overuse in addition to underuse

Researchers developed claims-based measures of low-value care

- Articles in *JAMA Internal Medicine* (Schwartz et al. 2014 and 2015)
- Measures based on Choosing Wisely, USPSTF*, literature, other sources
- 2 versions of each measure
 - Broad (higher sensitivity)
 - Narrow (higher specificity)

Examples of low-value care measures

Measure	Source	Broader version	Narrower version
Imaging for nonspecific low back pain	Choosing Wisely	Back imaging w/diagnosis of low back pain	Excludes certain diagnoses; limited to imaging within 6 wks of back pain diagnosis
Colon cancer screening for older patients	USPSTF	Colorectal cancer screening for all patients aged ≥ 75	Only patients aged ≥ 85 w/no history of colon cancer
Head imaging for uncomplicated headache	Choosing Wisely	CT or MRI imaging of head for headache (not thunderclap or post-traumatic)	Excludes diagnoses that warrant imaging

Our analyses of low-value care measures

- Last year, we applied 26 measures to 2012 data (100% claims)
 - Spending based on standardized prices from 2009
 - Presented results at April 2015 meeting; published in data book and March report
- This year, we applied 31 measures to 2012 and 2013 data
 - Updated standardized prices from 2009 to 2012

Our analysis of 31 low-value care measures: Aggregate results, 2013

- Broader measures
 - 38% of beneficiaries received at least one low-value service
 - 74 low-value services per 100 beneficiaries
 - Medicare spending on low-value care: \$7.1 billion
- Narrower measures
 - 23% of beneficiaries received at least one low-value service
 - 35 low-value services per 100 beneficiaries
 - Medicare spending on low-value care: \$2.6 billion

Some categories of low-value care account for most of volume, spending

	Broader version of measures	Narrower version of measures
Categories that account for most of volume	<ul style="list-style-type: none">• Imaging• Cancer screening	<ul style="list-style-type: none">• Imaging• Diagnostic and preventive testing
Categories that account for most of spending	<ul style="list-style-type: none">• Cardiovascular tests/procedures• Other surgical procedures	<ul style="list-style-type: none">• Other surgical procedures• Imaging

Results for selected individual measures, 2013

Measure	Broader version		Narrower version	
	Count per 100 patients	Spending (millions)	Count per 100 patients	Spending (millions)
Imaging for nonspecific low back pain	11.9	\$236	3.4	\$68
PSA screening at age \geq 75 yrs	9.2	82	5.2	47
Colon cancer screening for older adults	8.4	443	0.4	4
Spinal injection for low-back pain	6.4	1,261	3.3	654

Results probably understate volume and spending on low-value care

- Limited number of claims-based measures of low-value care
- Challenging to identify low-value care with claims data
- Spending estimates for low-value care don't include downstream services that result from the initial service
- Study estimated that Medicare spent \$145 million/year on PSA tests + related diagnostic services for men age ≥ 75 (Ma et al. 2014)
 - PSA tests accounted for 28% of spending
 - Biopsies accounted for 50%, pathology for 19%

Pioneer ACOs reduced low-value care compared with control group (Schwartz et al. 2015)

- Researchers compared change in use of low-value care between beneficiaries in Pioneer ACOs and control group of other beneficiaries
- 31 measures
- ACOs had greater reduction in volume (-1.9%) and spending (-4.5%) for low-value care relative to control group

Potential policy directions

- Payment/delivery system reform (e.g., ACOs)
- Quality measurement
- Medicare coverage policy
- Increase beneficiary engagement (e.g., cost sharing, shared decision making)